

Remarks

This is a complete response to the Office Action of April 27, 2004.

Subparagraph 1.) of the second paragraph on page 2 of the Office Action objected to the drawings because the reference character "30'" was not illustrated. A corrected replacement sheet of the only figure of the drawings now properly shows reference character 30' having lead lines reaching from 30' to the water portion inside of tubular wall 41. An annotated sheet shows this change in red.

Subparagraph 2.) of the second paragraph on page 2 of the Office Action objected to the drawings because the reference character "30" had been used to designate both "fluid 30" and "water 30". By amendments to the specification in paragraphs starting with line 8 on page 5 and line 11 on page 6 the term "fluid 30" has been changed to correctly read "water 30" to properly conform the use of this term throughout the specification. Since reference character "30" was included properly in the drawings as filed, no amendment to the drawings re "30" is required.

Subparagraph 3.) of the second paragraph on page 2 of the Office Action objected to the drawings because the reference character "43" on line 11 of page 5 and the reference character "30a" on line 15 of page 5 have both been used to designate open-ended bottom. The reference character identified as "43" on line 11 of page 5 was in fact 43', and reference character "30a" on

line 15 of page 5 has been changed to read "43'" by amendments to the paragraph of the specification starting with line 8 on page 5. Use of the term open-ended bottom 43' is consistent throughout the specification. Since reference character "43'" was included properly in the drawings as filed, no amendment to the drawings re "43'" is required.

Claims 1-16 were in this case as filed. Claims 1 and 9, rejected under 35 U.S.C. 102(b) and 103(a), have been cancelled by this amendment. Claims 2-8 and 10-16 were indicated as being allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph.

Rejection of Claims 1-16 Under 35 U.S.C. 112, second para.

Claims 1-16 have been rejected under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Subparagraph (a) on page 3 of the Office Action said that the preamble of Claim 1 (and consequently its dependent claims 2-8) recites a distillation apparatus, however, no evaporator, boiler or still has been recited in the body of the claims. The subparagraph further said that a distillation apparatus, by definition would [be] comprised in combination of an evaporator and a condenser. These comments also applied to claim 9.

Contrary to subparagraph (a) of the Office Action, the subject matter of claim 1 (now incorporated in claim 2 as amended) does recite the constituents of a distillation apparatus. However, the words chosen to identify these

constituents are different than the words "evaporator, boiler or still" of subparagraph (a) of the Office Action and are recited as:

a container holding water;

a heating section on said container and extending into said water to boil said water into a vapor;

a condenser section on said container and adjacent to said heating section to condense said vapor into distilled water;

a thermoelectric section having a Peltier effect device interposed between said heating section and said condenser section, said Peltier effect device having one side adjacent and in contact with said condenser section to transfer heat therefrom and an other side adjacent to and in contact with said heating section to transfer heat thereto to boil said water into said vapor and feed said vapor through said condenser to condense it into said distilled liquid (emphasis added).

Contrary to subparagraph (a) of the Office Action, the combination of an evaporator and a condenser of a distillation apparatus is clearly set forth in claim 2 as amended. The underlined, bold-type recitations of the preceding four subparagraphs set forth what the Office Action called the "evaporator", and the underlined bold-type recitations of the following two subparagraphs set forth for what the Office Action called the "condenser":

a condenser section on said container and adjacent to said heating section to condense said vapor into distilled water; and

a thermoelectric section having a Peltier effect device interposed between said heating section and said condenser section, said Peltier effect device having one side adjacent and in contact with said condenser section to transfer heat therefrom and an other side adjacent to and in contact with said heating section to transfer heat thereto to boil said water into said vapor and feed said vapor through said condenser to condense it into said distilled liquid (emphasis added).

Contrary to subparagraph (a) of the Office Action, the subject matter of claim 9 (now incorporated in claim 10 as amended) does recite the constituents of the "evaporator" and "condenser" of a distillation apparatus in addition to other recitations.

Claim 10 has the steps incorporating the constituents of what the Office Action called the "evaporator" and the constituents of the "evaporator" are clearly set forth below in the underlined, bold-type recitations:

extending a heating section into liquid in a container;
heating said liquid to boil said liquid into a vapor;
condensing said vapor into a distilled liquid in a condenser section on said container and adjacent to said heating section;
transferring heat with a Peltier effect device interposed between said heating section and said condenser section, said Peltier effect device having one side adjacent and in contact with said condenser section to transfer heat therefrom and an other side adjacent to and in contact with said heating section to transfer heat thereto to boil said liquid into said vapor and feed said vapor through said condenser to condense it into said distilled liquid, (emphasis added).

Claim 10 has the steps incorporating the constituents of what the Office Action called the "condenser" and the constituents of the "condenser" are clearly set forth below in the underlined, bold-type recitations:

condensing said vapor into a distilled liquid in a condenser section on said container and adjacent to said heating section;
transferring heat with a Peltier effect device interposed between said heating section and said condenser section, said Peltier effect device having one side adjacent and in contact with said condenser section to transfer heat therefrom and an other side

adjacent to and in contact with said heating section to transfer heat thereto to boil said liquid into said vapor and feed said vapor through said condenser to condense it into said distilled liquid; (emphasis added).

Thus, the claims clearly set forth the constituents of the claimed distillation apparatus. Reconsideration and withdrawal of this ground of rejection are requested.

Sufficient antecedent basis now is recited in claim 2 for "said vapor" since lines 3 and 4 of amended claim 2 recite:

a heating section on said container and extending into said water to boil said water into a vapor (emphasis added).

Reconsideration and withdrawal of this ground of rejection are requested.

Claim 7 has been amended to recite "said" before condenser to make clear that it is the same condenser initially recited in the claims, viz. claim 2 as amended. Reconsideration and withdrawal of this ground of rejection are requested.

Claim 10 has also been amended to remove the second instance of the word "extending" since it was redundant.

Therefore, claims 2-8 and 10-16 particularly point out and distinctly claim the invention and the '112 ground of rejection no longer applies.

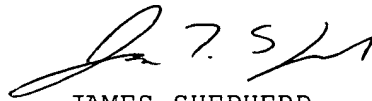
Claims 2-8 and 10-16 were objected to as being dependent on a rejected base claim but would be allowable if rewritten in independent form and including all the limitations of the base claim and any intervening claims. Claims 2-8 and 10-16 have been so rewritten and are allowable.

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Claims 2-8 and 10-16 define a patentably significant advance in the state of the art in definite form and free of the art, and are allowable.

Accordingly, an early Notice of Allowance is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'J. Shepherd', is written over the typed name.

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